# *HEALTH CARE*

*A Report on the Industry*

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# HEALTH CARE

## ABSTRACT

Health care matters to everyone. At the most basic level, every American has an obvious personal stake in developing and maintaining a robust health and medical system. Beyond personal health, however, the nation has a stake in a healthy, productive population. Sick people can't work. Unfit soldiers cannot defend us. With more than 15 percent of the nation's Gross Domestic Product (GDP) now devoted to health care, the health care system affects the strategic health of our nation and world. For the Department of Defense (DoD), the issue is not only keeping a healthy fighting force, but finding a way to pay for and control the growth of the rapidly rising health care bill. In the wake of 9/11 and the Global War on Terrorism (GWOT), health care has taken on an increased relevance as a national security issue. Attention is on our health care network's ability to surge for consequence management, and our recognition of the political and economic consequences of global pandemics. At its core, the debate over health care comes down to three competing interests: improving quality, assuring access, and controlling costs. Unfortunately, current trends are discouraging. As we spend more we improve our ability to treat people, but the overall health of our population does not improve significantly and access to care appears to be decreasing. The system is out of balance. A holistic approach to addressing imbalances in the industry is crucial, but the very breadth of the industry and competing interests makes any move toward a systemic solution daunting. The solution likely will have to be a uniquely American blend of free enterprise and government intervention borne out of compromise and tradeoffs.

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## PLACES VISITED AND BRIEFINGS RECEIVED

**Domestic**

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- Washington Hospital Center, Washington, DC
- USS COMFORT, Baltimore, MD
- John Hopkins University and Medical Center, Baltimore, MD
- George Washington University Medical Center, Washington, DC
- East West Academy of Healing Arts, San Francisco, CA
- Kaiser Permanente Hospital, Oakland, CA
- Siemens Corporation, Cancer Research and Manufacturing Center, Concord, CA
- Daan Inc. Acupuncture and Herbs Center, San Francisco, CA
- American College of Traditional Chinese Medicine, San Francisco, CA
- Cardinal Health, Dixon, CA

**International**

- Ministry of Public Health, Tunis, Tunisia
- Charles Nicole Public Hospital, Tunis, Tunisia
- Magnetic Resonance Imaging (MRI) Center, Tunis, Tunisia
- Polyclinic La Soukra, Tunis, Tunisia
- Ibn El-Jazzar Hospital, Kairouan, Tunisia
- Military Health Directorate, Kairouan, Tunisia
- Military Blood Bank, Kairouan, Tunisia
- Military Hospital, Tunis, Tunisia
- City of Medicines Medical Supplies Distribution Center, Tunis, Tunisia
- World Health Organization (WHO), Geneva, Switzerland
- World Health Assembly of the WHO, Geneva, Switzerland
- International Committee of the Red Cross, Geneva, Switzerland
- U.S. Mission to International Organizations, Geneva, Switzerland
- UNAIDS Organizations, Geneva, Switzerland
- Chelsea and Westminster Hospital, London, England
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## INTRODUCTION

Health care matters to everyone. At the most basic level, every American has an obvious personal stake in developing and maintaining a robust health and medical system. We would rather never get sick and expect a health care system to work toward that goal. When we do get sick, we expect someone or something to make us better. We do not accept that any disease is forever incurable. We expect constant advances. And, we do not accept that staying or getting healthy should bankrupt us.

Beyond that, however, the nation has a stake in a healthy, productive population. Sick people can't work. Unfit soldiers cannot defend us. Treating sick people costs money – a lot of money – that then cannot be spent on other pressing needs. With more than 15 percent of the nation's GDP now devoted to health care, the health care system affects the strategic health and security of our nation and world.

In the wake of 9/11 and the GWOT, health care has taken on a new (or increased) relevance as a national security issue. Specifically, attention is appropriately being paid to the ability of our health care networks to surge if needed for consequence management. Also, there is growing concern, particularly in the Department of Homeland Security (DHS), over infrastructure protection in the health care arena, not only of facilities, but also of lines of supply and communication. Meanwhile, the defense budget itself is far from immune to the rapidly growing cost of health care. With little real growth expected in DoD's budget over the next decade, health care cost growth threatens to squeeze other defense accounts, particularly modernization and force structure. Finally, there is a growing understanding that significant national security implications may occur due to global health issues such as HIV/AIDS and other global pandemics.

Because of the size and scope of the industry, this report can but scratch the surface of the major issues that must be addressed. What became clear to the members of the seminar is that, no matter what the specific health care related issue – whether it be caring and paying for the uninsured, controlling costs, coping with an aging population, or ensuring high standards and accountability – the tensions in the system are almost always the same. At its core, the debate over health care anywhere comes down to three competing interests: improving quality, assuring access, and controlling costs.

Unfortunately, current trends are discouraging. As we spend more and more, we improve our ability to work miracles, but the overall health of our population (at least when compared to other developed nations) does not improve significantly, and access to care appears to be decreasing. The system is out of balance.

The free market appears as unlikely as a wholesale government takeover to bring us to the equilibrium of cost, access, quality. A holistic approach is needed to achieve a balanced "Iron Triangle," but the very breadth of the industry and mind-boggling number of competing interests makes any move toward a systemic solution daunting. As difficult

as the challenge is, it must be faced. There may be lessons to be learned from other nations, but the solution likely will have to be a unique American blend of free enterprise and government intervention borne out of compromise and trade-offs. The federal role in finding a solution is many-fold, but chief among its goals should be first, to become a more efficient buyer of health care and, second, to facilitate the bringing together of the diverse and competing interests that will have to be reconciled if the cost-access-quality balance is to be struck.

## THE INDUSTRY DEFINED

U.S. health care is one of the largest industries and is highly fragmented. One ICAF lecturer likened it to hundreds of cottage industries, none of them coordinated with the others. "The industry is a complex mix of government; nonprofit and commercial organizations; and individual efforts to finance, provide, and regulate health care services. Major industry sectors include:"[1]

- Financing Sector. Organizations that provide personal health care providers, such as the Centers for Medicare and Medicaid Services, state workers' compensation programs, health insurance companies, and health maintenance organizations
- Institutional providers. Organizations that provide personal health care services, such as physician offices, medical groups, hospitals, mental health facilities, nursing homes, and home health agencies.
- Individual Providers. Professionals who offer personal health care services, such as physicians, dentists, chiropractors, nurses, pharmacists, and psychologists.
- Government Providers. Government agencies that provide a complete range of health care services for our military (active duty, reserve component, military dependents, and retired military members) and veterans (Veterans Administration).
- Public Health Agencies. Government agencies that promote health and prevent disease in populations, such as the Centers for Disease Control and Prevention, the Public Health Service, the Bureau of Indian Affairs and state/local health departments.
- Enablers. Organizations that support and facilitate the provision of health services, such as trade and professional associations (for example, the American Hospital Association and American Medical Association), special interest groups (American Heart Association), research organizations (National Institutes of Health), and educational institutions (medical and nursing schools).
- Suppliers. Organizations that provide products and services, such as pharmaceutical manufacturers, hospital supply and equipment companies, and consulting firms.
- Regulators. Government agencies and private organizations that regulate health care institutions and professionals, such as medical specialty societies, state licensing boards, state insurance departments, and the Joint Commission on the Accreditation of Health Care Organizations.

The U.S. health care industry is big business. U.S. health care expenditures exceed 15 percent of the GDP and continue to rise. In fact, if nothing is done to control rising health care costs, expenditures will reach 19 percent of the GDP by year 2015. In comparison, other developed nations spend between 7 and 11 percent of their GDP. Moreover, if health care were a national economy, it would rank sixth in the world in terms of size, just after Germany. The U.S. spends its dollars on hospital care; physician services; nursing home and home health care; pharmaceuticals; personal health care and medial products; government administration and net cost of private insurance; other professional services; dental services; and investments. Hospital care and physician services account for the largest share of U.S. health care expenditures. However, some interesting new trends have developed over the past couple of decades showing a shift in expenditures to the pharmacy sector and the nursing home and home health care sector.

## CURRENT CONDITION

The health care industry is constantly adjusting to new government policies, insurance industry financing rules, and shifts to outpatient treatment and home nursing care options. Group practices and Health Maintenance Organizations (HMOs) continue to absorb individual physician practices. Hospital closures and clinic consolidations continue to improve operating efficiencies. Hospital occupancy rates, which plummeted because of cost pressures and reduced lengths of stay, finally stabilized in 1998. In the U.S. today, there remain approximately 4,908 acute care hospitals[2] and 18,000 nursing homes with 1.9 million beds.[3]

The military health care system faces the same consolidation. Each round of base closures since the end of the Cold War has seen closures and consolidations of military medical facilities, forcing more DoD medical-care recipients to increasingly rely on the private sector for care through TRICARE, the military's insurance program. The latest round of Base Realignment and Closure (BRAC) proposes further reductions and consolidations, all of which have impacts on access to care.

There are 295 million U.S. residents who expect to receive health care whenever they need it. Their expectations of receiving the highest quality of care with unconstrained access at the lowest cost fuels the problem of increasing costs and limited accessibility in a very turbulent industry. When it comes to quality health care, the U.S. provides the best for high-end care. The problem is for a significant portion of our population, routine care is sub-standard and many Americans cannot afford the high-end health services.

Nearly 1.5 million physicians, dentists, nurses, physician assistants, therapists, pharmacists, and other medical professionals provide health care in approximately 200,000 private medical offices and clinics around the U.S. One of the most significant changes within the industry has occurred in the role of providers—that is, the dramatic shift from a historical, paternalistic culture to one of cooperative provider–patient consultation. Providers also include institutions that provide medical education and firms

that produce medical equipment and supplies, ranging from linear accelerators to bedpans and bandages. For example, pharmacy benefit managers, firms that negotiate with drug companies for the best value on the bulk purchase of pharmaceuticals, provide pharmacy benefits to about half of the insured U.S. population.[4]

Payment for health care in the U.S. is a complicated, confusing and inefficient mix of public and private systems. As noted above, the administration of a Byzantine system as complex as the one in the U.S. drains billions that could otherwise be spent on providing care.

Medicare is the largest public health care payer. In 2004, net federal spending on Medicare was $265 billion for the health care of 42 million elderly and disabled Americans.[5] For almost 50 percent of those who live in the U.S., however, private employers fund health care. Beyond the government-sponsored and employment-based coverage, approximately 60 million U.S. residents are self-employed or otherwise elect to pay for health insurance on an individual basis. The 45 million U.S. residents who have limited or no medical insurance coverage include many young adults who elect not to purchase coverage (but will expect to be cared for if a catastrophic illness or injury strikes), those who do not apply for Medicare/ Medicaid benefits, and a large number of residents, including children, who simply cannot afford insurance. Unless something is done to reform Medicare, by 2019, the program will consume 24 percent of all federal income tax receipts and 51 percent by 2042.

Health care costs are rising, year after year, faster than the general inflation rate. In many rural and urban areas, access to care is decreasing. There has been a decrease in the number of community hospital beds. However, access is more than availability of hospital beds. Even if more hospital beds were available, many Americans do not have access to care because they are uninsured. And while technological advances are resulting in cures unimaginable just a few years ago, the general level of healthiness of Americans is not increasing in step with the increased spending. In fact, if looking at health care costs on a continuum with birth on one end and death on the other, 80 percent of health care expenses are incurred in the last four months of life. That, of course, means that elderly people run up a lot more health care bills. Additionally, America is getting older and living longer which is a huge impact not only on health care costs, but on the types of care that will be demanded.

Health care coverage is becoming increasingly unaffordable. The premium for employer-based health insurance rose by 11.2 percent in 2004, the fourth consecutive year of double-digit increases. [6]

In addition, in an effort for employers to become more cost competitive in a global marketplace, they are pushing health care costs to their employees. For example, since 2001, the employees' share of health insurance costs has soared 63 percent for single coverage and 58 percent for family coverage.[7] Also, employers are reducing or eliminating employee health care coverage as a benefit and it is likely this will impact

significantly the numbers of Americans covered by health care insurance in the coming years. [8]

The following statistics were taken from the Center for Disease Control (CDC) report on health care for 2004[9] and indicate why the U.S. health care system will be challenged even further in the future.

- By 2005, approximately 12 percent of the American population will be age 75 or older. The aging population is growing with the first baby boomers reaching age 65 in 2018.
- Despite all the government efforts, since 1990 there has been only a small decline in the number of Americans who smoke. In 2002, 25 percent men and 20 percent women were documented as smokers.
- Obesity is on the rise. From 1999-2002 the percentage of Americans aged 20-74 who are obese rose from 15 to 30% percent of that population.
- Infant mortality in 2002 rose to 7.0 infant deaths per 1000 live births from 6.8 in 2001.
- Even though there is a decline in the percentage of the population dying from diseases, heart disease is still the leading cause of death for Americans followed by cancer and strokes.
- The number of office calls to physicians increased between 1995 and 2002, from 271 per 100 people to 316 per 100.
- The number of community hospital beds declined from 927,000 to 821,000 from years1990-2002. This statistic is particularly troubling to those who plan for consequence management. As one physician told the Industry Study Seminar, the constant squeeze on hospitals to cut costs has meant a war against empty beds, which means the ability of the system to surge in a time of emergency is constrained.

## CHALLENGES

Challenges abound in the health care arena:

- Alarming growth in federal health care expenditures and a shift of health care costs from employers to employees
- Growing number of uninsured and underinsured and the costs they impose on the system
- Current and looming health care personnel shortages
- Outdated information technology and predominantly manual processes
- Contraction in the system that may leave it unable to respond to a catastrophe
- Risk of global pandemics

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***Alarming rate of growth of federal health care expenditures and a shift of health care costs from employers to employees***

Federal government health care expenditures comprise a huge portion of U.S. mandatory spending. Considered an entitlement, this area is largely off limits for yearly Congressional budget debate. As a result, mandatory expenditures have large, unchecked appetites. As a percent of mandatory expenditures, health care accounted for 37 percent in 2003 and will account for 48 percent by 2013.[10] This cost growth trend should raise a red flag. While many interdependent activities and behaviors contribute to this challenge, three cost drivers in particular merit attention: pharmaceutical cost growth, increasing health care demands, and rising liability insurance expenditures.

Pharmaceutical cost growth. The cost of prescription drugs is the fastest growing segment of health care goods and services expenditures.[11] Prescription drug expenditures more than doubled in five years, growing from $87.3B in 1998 to $184.1B in 2003.[12] Research and development can account for some of the growth, as could pharmaceutical marketing costs. Yet another element of cost growth, growing demand, deserves further exploration. As new research and development results in new medications, demand for the new medications rises. In the past, heart disease could lead to extended in-hospital care. Now, with the advent of cholesterol controlling medications and other pharmaceutical advancements, such diseases may be treated and managed with prescription medications. This increases demand for costly prescription medications, which adds to growing health care demands.

Increasing health care demands. With the expansion of treatment options available, health care demand increases. Organ transplants require entire teams of specialists. The number of lung transplants grew 434 percent from 1990 to 2003, with 203 in 1990 compared to 1,085 in 2003, with another 3,925 people in 2003 waiting.[13] Statistics for liver transplants are similar, with the number of procedures doubling over the same timeframe from 2,631 to 5,671 and another 17,500 people in 2003 waiting.[14] In the realm of more commonplace procedures, consider knee injuries. An image of the knee, such as an MRI, represents a costly option available due to advancements in medical technology. The MRI may provide useful information in diagnosing sources of pain. However, is it always necessary? It may represent an example of an over-prescribed procedure that drives up health care costs. Preventable diseases also deserve attention. Preventable diseases lead to chronic conditions that account for 70 percent of all medical spending.[15] This implies the ability to curb demand with wiser consumer lifestyle choices, such as smoking cessation, healthful nutrition, and reasonable levels of activity. It also implies a healthier population if that population is focused on being healthy versus being sick. In addition to the expansion of costly treatment options, population demographics bear consideration. Another factor contributing to increasing health care demands is the aging population. At current usage rates, people over the age of 65 account for more than a third of total U.S. health care expenditures.[16] Assuming this pattern of senior-centric demand continues, any significant increase in the aging population should in turn drive substantial increases in health care expenditures. In a 2004 report, the U.S. Census Bureau projects noteworthy trends in our aging population. The number of people 65 and older will increase 67 percent from the years 2000 through 2050. Furthermore, the number of people older than 85 will grow 233 percent.[17]

Rising liability insurance expenditures. Large court settlements for health care related issues increase the risk for insurance companies to insure doctors, hospitals, and other health care providers. Economic damage compensations are measurable and relate directly to provider quality indicators, providing a financially motivating check for health care provider behavior. Non-economic and punitive damages, however, such as pain and suffering, complicate cost risk management. How much will a jury award to a family who lost their only child on the operating room table? While no sum could possibly compensate for the loss, successful settlement patterns tend to influence future expectations. Although other factors have an impact - such as insurance company investment practices - there is no question that larger settlements drive up costs. Fear of suits leads to over-testing and other defensive measures and, in some cases to doctors simply getting out of high-risk practices.

***Growing number of uninsured and underinsured and the costs they impose on the system***

Perhaps nothing introduces more inefficiency and more misallocation of resources into the U.S. health care system than the existence of 45 million Americans, almost 1 in 6, who have no health insurance. The system not only introduces a wide range of inefficiencies into the health care market, but its effects are felt throughout the economy in the form of increased bankruptcies, lost hours at work and a generally less healthy population. Because the uninsured and underinsured often seek treatment when they are seriously ill instead of moderately ill, this adds to a less healthy population. It also increases costs because treatment often takes place in emergency clinics and hospitals where care is most expensive.

From 1998 to 2003, private insurance expenditures rose 58 percent from $382.9B to $606.7B.[18] It requires little imagination to envision the speed with which this cycle could spin out of control, resulting in prohibitively priced insurance and a growing number of underinsured consumers. In 2002, 15 percent of the U.S. population was uninsured, including 8.5 million children.[19]

Although studies show that the uninsured and underinsured frequently do not receive adequate health care, they do receive some care. Americans have so far been unwilling to adopt a system of universal or mandatory health insurance, but they are not willing to see sick people turned away from hospitals. Go into almost any hospital emergency room in America and you will see a sign advising all patients that they have a right to care, even if they cannot pay for the services. In fact, hospital emergency rooms have become “the safety net providers” in that the uninsured often do not seek proper health care until the health issue develops into an emergency issue. Unfortunately, that safety net is very expensive and highly inefficient. As the American College of Emergency Physicians put it starkly: “The uninsured, who receive most of their care in emergency departments, live in poorer health with more serious medical conditions,

delay needed care, and are more likely to die younger than those with health insurance." (American Hospital Publishing, p. 1).

America appears to be alone in the developed world in accepting such huge numbers of uninsured citizens. For instance, Saudi Arabia provides free health care for all of its citizens, and through insurance policies for non-Saudis who are in Saudi Arabia legally. Similarly, in Tunisia, every citizen is entitled to a baseline level of care. Those with additional resources can buy higher quality services. In Great Britain, the same scenarios are repeated but the levels of care are more like the U.S. However, those systems of care are not without problems. Waiting lists for care are a constant concern. But the notion that every citizen is entitled to care is well accepted and allows for more integrated planning.

***Current and looming health care personnel shortages***

The trend of nursing shortages undermines care access and quality. The American College of Health Care Executives reported in October 2004 that 72 percent of hospital Chief Executive Officers had a nursing shortage at their facilities.[20] Increased demand accounts for part of the problem. The U.S. Department of Labor identified nursing as the top occupation in terms of job growth through the year 2012.[21] The personnel shortage extends beyond nursing. Of the top ten fastest growing occupations through 2012 listed by the Bureau of Labor Statistics, six of them are health care professions, including medical assistants, physician assistants, home health aides, medical records and health information technicians, physical therapist aides, and physical therapist assistants.[22]

At the same time, the growing cost of malpractice insurance crisis is convincing doctors in some specialties – obstetrics and neurosurgery, for example – to abandon their practices, further reducing access to care.

***Outdated information technology and predominantly manual processes***

Medical technology related to treatment creates miraculous results. It is ironic, therefore, that the same industry that creates technological marvels to cure patients is falling further and further behind when it comes to information technology.

Health care experts agree that information technology (IT) has the potential to increase efficiency by allowing providers to share medical records and other information. Today's Congress is introducing legislation to advance health care IT as information systems are currently being developed in an almost hobby-shop like environment with no common standards and almost no interoperability.[23] Even in the government, systems developed (or under development) by the Defense Department and the Department of Veterans Affairs, cannot share patient records. Paper records continue to dominate the industry. Electronic medical records are just one example of outdated technology and manual processes. Information technology could be improved in virtually all of the

health care systems from improving the flow of patients in hospitals to computer-aided medical appointments.

***Contraction in the system that may leave it unable to respond to a catastrophe***

The Health Care seminar heard from government and private-industry officials who worry that the system is unprepared to deal with a catastrophic terrorism event, particularly if the attack is biological.

An official from DHS warned that few communities have viable plans to protect hospitals, clinics, and medical supply line from attack.

An official at Johns Hopkins University said that the constant pressure on hospitals to reduce the number of in-patient beds leaves most hospitals unable to deal with mass casualties because of chemical, biological, or nuclear contamination, particularly if they require isolation and dedicated patient beds.

***Risk of Global Pandemics***

Challenges affecting global public health continue. Globalization with increased travel and trade means disease can spread more quickly. Diseases such as HIV/AIDS and tuberculosis demand increased emphasis. By December 2004, women accounted for 47 percent of all worldwide HIV cases, and for 57 percent in Sub-Saharan Africa.[24] In a UNAIDS briefing, the seminar learned that 14,000 new HIV cases are contracted each day and that 80 percent of those infected do not know they are infected. The seminar also learned that new HIV strains are becoming more virulent. Highly contagious but curable tuberculosis kills about two million people a year, including 83 per 100,000 in Africa, and 39 per 100,000 in South-East Asia.[25] Lifestyle choices, such as tobacco use, increase global public health challenges. Tobacco kills more than AIDS, drugs, road accidents, murder, and suicide combined.[26] Tobacco use caused over four million deaths in 2000, evenly split between industrialized and developing countries. However, seven million of the projected ten million deaths from 2025 to 2030 will occur in developing countries.[27] Finally, highly contagious diseases, such as avian influenza, pose potential pandemic threats. The WHO's January 2005 report on the avian influenza threat provided insights about the patterns of viral mutations resulting in the deaths of 120 million chickens in Asia within three months. While this virus has resulted in only 44 human deaths since 1959, the report emphasized the lack of complete understanding about the potential for such viruses to threaten humans further.[28]

**OUTLOOK**

While our current national security strategy addresses the need to control the rising costs of health care, the outlook for success is not bright. The President and Congress have named health care as a top priority and plan to focus on finding ways to reduce the cost of Medicaid, reform Medicare law, regulate malpractice suits, reduce employer insurance costs, consider legalizing re-importation of medications and expand coverage for the uninsured. But, reducing costs may not make us healthier. Health care

reform needs to take on a holistic approach to solving not only the cost issue but the need for better access and quality care: the Iron Triangle.

So, there exists a general consensus that the patchwork system is in need of serious repair. It is equally clear from our readings and guest speakers, however, that there is no consensus on what should be done. Further, reaching consensus will be difficult given the number of well-funded competing interests on both sides of the many issues included in the health care debate.

For the foreseeable future, the health industry will consist of a wide and varied range of commercial, private, and public institutions providing a host of products and services to the consumer. The consumers are dispersed among segments of society with diverse individual and collective needs and a wide variance in ability to pay.

The short term (1-5 years) outlook for the industry is likely to be dominated by piecemeal efforts to reform. Specific measures are being taken to reduce lawsuits which drive up the costs. Medicare and Medicaid are on the legislators' agenda to reform entitlement programs. Measures are being considered to expand coverage to the uninsured and to increase incentives to employers to stop reducing benefits or eliminating insurance as a benefit. The Federal Drug Administration may have to relax restrictions on importing drugs from Canada if U.S. pharmaceutical companies do not lower their prices.

Over the long term, it is hard to see how the current system can be sustained. As our population ages, the demand for health care will increase. The costs for entitlements will continue to grow and put a strain on our budget. Medicare now finances health care for about 40 million Americans, accounting for about one-eighth of all federal expenditures. Medicare is expected to nearly double its share of the economy by 2030, crowding out other spending and economic activity of value. The Medicare Hospital Insurance Trust Fund is projected to begin running a deficit in 2016 and to be depleted by 2029. Measures will have to be taken to change entitlement eligibility either by reducing benefits or increasing the age at which benefits begins. While that might reduce the pressure on the federal government, it will not reduce demand for care, but merely shift costs elsewhere.

Scientific advances will continue and provide yet more pressure on the cost side while further blurring the lines between needs and wants. Health care issues are emotional ones, and when technology may produce miraculous results, patients and their families demand the application of all available tools – no matter the cost. This makes it difficult to assess what society can reasonably afford.

The public is concerned about the quality of care, consumer protection mechanisms, and the availability of information to allow purchasers to make informed choices. According to federal cost estimates, U.S. taxpayers will directly shoulder half of the nation's health care costs by the end of the next decade. These estimates also project that by 2014 health care spending will take up nearly 19 percent of the GDP, up from 15

percent in 2003. The trends have analysts continuing to question whether the nation can afford to pay for the health care of the retiring baby boom generation without a major reordering of its budget priorities. Life expectancy rose to 76.6 years of age by 1998 and is projected to rise to age 81 by 2030. The ability to live longer is good news in many respects, but it does present the country with the challenge of creating public policies that are appropriately relevant to caring for aging Americans. [29]

The medical supplies industry is expected to remain strong in the foreseeable future. An aging population, continued product innovation, and growing foreign sales should propel medical products stocks to new heights. In 2003, Congress passed the Medicare Prescription Drug Improvement and Modernization Act that creates a new prescription drug benefit. This benefit takes effect in 2006. It also gives private insurance companies and managed-care plans up to $46 billion in higher payments over 10 years and incentives to compete with Medicare for the prescription drug business and the general health care needs of a huge and growing segment of the population. However, it does not address the long-term imbalances in the system.

Finally, the current nursing shortage is anticipated to be longer in duration and more severe than previous shortages. Although America hires nurses from foreign countries such as the Philippines, shortages still exist. By 2020, it is predicted that there will be at least 20 percent fewer registered nurses nationally than needed. Further, the demand for registered nurses over the next few decades will continue to rise due to both the impending retirement of the baby boomer generation and changes in health care.

## GOVERNMENT: GOALS AND ROLE

As the nation's largest purchaser of health care, the federal government has an obvious role as consumer and steward of taxpayer funds. As a protector of national security, the government has a vital role in protecting the populace against disease and attack and in dealing with the consequences of any attack. A myriad of often-conflicting federal laws and regulations govern nearly every aspect of the health care industry. Additionally, each state has its unique system of regulations that governs everything from health care delivery and insurance to local health codes and care delivery systems.

At the federal level, the Department of Health and Human Services (DHHS) is the government's principal agency for protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves. The department includes more than 300 programs, covering medical research, food and drug safety, Medicare, Medicaid, medical and social science research, and substance abuse, among others. The DHHS regulates the industry through its various centers. But involvement in health care extends far beyond DHHS.

DoD, through its own extensive organic medical capabilities and through purchases of private care for service members, family members and retirees, is a major consumer and provider. In fact, the National Defense Authorization Act for fiscal year 2005 extends various levels of TRICARE health benefits to the reserve components.

Reservists who have served on extended active duty now receive similar health benefits as the active duty force. Likewise, the Veterans' Affairs Department provides care to millions of veterans each year. This number and the continues to grow, as does the demand for level of care, as veterans of Afghanistan and Iraq are surviving more grievous injuries and returning home with demanding complications. These factors add to the increasing cost of health care in the DoD and the nation as a whole.

Many other agencies also have roles: Department of Homeland Security, Food and Drug Administration, Department of Agriculture, and others. Since 9/11, the vital role of the government – federal, state and local – in ensuring that the health care system can respond to crisis has come sharply into focus. The Executive Branch of government can require industry to respond to national emergencies but how well this would be accomplished in the health care arena is not known. Although the DHS has made health care infrastructure one of its areas of special concern, coordinating a national effort is proving difficult. In the event of a requirement to surge or mobilize the industry, several agencies would be challenged in coordinating activities in order to respond quickly and adequately. They would need to have emergency plans and industry sources pre-positioned to deliver goods and services to our citizens here and or abroad. The increased production of medicines and equipment, as well as the mobilization of health facilities and civilian doctors, nurses and technicians, could be necessary at a moments notice.

The role of government also delves into the ethics arena. The government serves as arbiter (sometimes reluctantly) on many of the thorniest ethics issues facing the nation in terms health care. Among them: medical malpractice liability, cloning, research on stem cells, right-to-die decisions, sexually transmitted disease prevention, and organ transplant priorities. The government also provides enforcement authority for professional groups such as the American Medical Association that seek to ensure the standards of health care professionals.

Agencies that regulate health care are spread across federal, state and local government with different missions and oversight responsibilities. This will make crafting any comprehensive reforms difficult.

**RECOMMENDATIONS:**

From research, classroom discussions, speakers, and domestic and international field studies, it became clear why it is so hard to address the health care dilemmas facing the nation. We do not have a health care system in this country: We have a patchwork of disjointed activities, some essentially private and some public and many a mix. Attempts to address one challenge will inevitably trigger unintended consequences in another area. It always comes back to tradeoffs between cost, access and quality. That said, we did reach consensus on several recommendations:

**Decrease administrative costs:** Estimates vary, but even if one accepts that middle ground, nearly 26 cents of every dollar spent on medical care in the U.S. is spent on administration, more than any developed country in the world. The figure is driven by

many forces ranging from the patchwork of uncoordinated payment systems, the attempts by providers to find ways to get compensation for caring for the uninsured, the ever-present threat of malpractice litigation, and growing federal regulation, just to name a few. With expensive technological advances continuing, the real hope for finding the money to bring access, quality and cost into better balance lies in attacking administrative costs and freeing up more money for actual care.

**Provide basic health care as a public service.** With the extensive and growing level of government involvement in health care, the idea that a free market will somehow fix the problems is just as unrealistic as the notion that government can provide all the answers. We must recognize that the government is and will continue to be the largest provider and consumer of health care.

One thing that became clear during our study is that Americans consider some basic level of health care to be a right even as we have 44 million people without insurance. This creates huge inefficiencies and wastes literally billions of dollars. We must, as a nation, face up to the fact that when people are seriously ill they are going to get care. Simply hiding the cost of that care by shifting it to paying customers' bills makes no sense and distorts the economics of health care. That means everyone should have some form of health insurance so that some expert system can guide them toward appropriate care, encourage preventive care, and work toward rationalizing delivery. The baseline care could be national health insurance or could be an expanded version of the government- and employer-subsidized network of privately run insurance, perhaps like the Federal Employee Health Benefit Plan that covers federal employees and retirees. The point is that if everyone is going to, in fact, have access to health care, it should be managed in a businesslike way.

One intriguing suggestion from a seminar speaker offered a phased approach, providing insurance coverage for all children up to age 24 first. At the same time, he suggested having Medicare start coverage at age 55, rather than at the current 65. Once those goals are accomplished, covering the remaining uninsured in the 25-44 year brackets would not be difficult, he said. Although politically challenging, the idea is worthy of consideration.

**Use Defense Department as a model to reform U.S. health care.** Although it is much maligned, some parts of the Defense Department's TRICARE health and insurance system may provide a model for the country. For its population – military members, their families, and retirees and their families - it ensures coverage. Like the British model, service that cannot be provided organically is purchased on the economy, at reduced rates. Military medicine (including TRICARE) faces the same fiscal pressure as the rest of the health care system. Those costs are now putting destructive pressure on the rest of the defense budget. The country must keep its commitment to provide health care to military members and their families, but Congress should consider lifting its ban on co-payments for office visits under TRICARE. A small co-payment is proven to reduce demand significantly while not making needed care unaffordable.

**Leverage IT to make delivery more efficient and improve care.** It is astounding that the same industry that is making so many technological strides in treating illnesses is so far behind other industry sectors in leveraging IT for its business practices. Many insurance claims systems are still paper-based, increasing administrative overhead, as are most medical charts. In many doctors' offices the highest paid person after the doctor is the insurance claims manager. More troubling, medical providers across the country – both private and public – are developing their own computer-based medical records systems, many of which will not be compatible with each other. The government must encourage – and if that does not work, require – development of a common standard for an electronic personal medical record that can be shared as people move from place to place. It could lead by example by insisting the Department of Veterans' Affairs and the Department of Defense agree on a common system, something that has not happened so far and requires manual transfer of medical records as patients move between the two systems.

**Emphasize wellness and prevention.** Like most health care systems, ours focuses much more attention on making sick people well than it does on keeping healthy people healthy. That needs to change. Speaker after speaker told us that small amounts spent on prevention pay huge dividends in avoiding curative care later. Our system must push a culture of helping people stay healthy, including making good lifestyle decisions such as diet, exercise and not smoking. We need to make fitness a key government policy initiative, working on multiple levels towards preventive versus curative solutions.

**Prepare for the aging of the "baby boomers."** Demographics are working against easy solutions to the health care dilemma. As the baby boom generation ages, it is entering the period when per capita health care expenses will begin to rise rapidly. Demand for eldercare will likely outstrip capacity. We must being now to plan for the bulge in the health care system. At the very least we must come to grip – through insurance programs or other means – with the huge bills that will be coming for nursing home care and other treatments for this generation.

**Decrease cost of pharmaceuticals.** Disease prevention and treatment increasingly relies on drugs, not hospitalization and invasive therapies. Developing these new drugs costs billions of dollars. Without the promise of fair returns, the drug industry will not invest in the massive research and development needed to develop new pharmaceuticals. That said, much of the world, through government-imposed price controls, avoids paying its fair share and shifting the costs to Americans, where price controls are an anathema. Americans – through their government – must insist on a more equitable distribution of costs by pushing down the costs of drugs in the U.S. and giving the industry more incentive to spread costs more fairly. The place to start would be in the new Medicare drug benefit. The provision that forbids Medicare officials from negotiating lower prices in recognition of the huge volumes of drugs that will be purchased should be repealed.

**Develop a national health care strategy linked to our national security strategy.** A constant theme in our field visits was the need to understand that world health – and

threats to health – have to be viewed as a national security issue. In an increasingly global market place, naturally occurring disease can spread quickly with devastating results. Biological weapons also can cause terror and tremendous harm. The U.S. government is waking to this reality and must continue to be a global leader in contingency planning, research for vaccines for diseases such as HIV/AIDS and other world health issues.

The few issues above only scratch the surface of those that will have to be addressed in any comprehensive plan to improve America's health care system. Ethical questions concerning end-of-life care, stem-cell research, cloning, and other issues abound. Current and looming shortages of critical personnel – especially nurses – must be addressed. A more rational way to compensate those injured by careless or incompetent doctors must be found. All of this must be done without discouraging the uniquely American tradition of constant technological innovation. Success will require thoughtful compromise and sustained effort – not the strong suits of our current political environment. However, doing nothing will eventually result in the collapse of the system under the weight of its own inefficiencies and contradictions.

## ESSAYS ON MAJOR ISSUES

### SINGLE PAYER SYSTEM

**Introduction.** This paper assesses the effects of implementing a single payer health care system in the U.S. Currently, market forces and government programs stumble along together determining the system's inputs and outputs. The profit motive encourages behavior within the health care system that may contradict patients' interests. Many believe health care is no place for profit, suggesting we would all be better off with a system void of for-profit activities. A single payer system provides a solution worth considering.

**Description.** Under a single payer system, the government would not control health care. Instead, it would act as the bill payer for all health care services and products. The key difference from the mixed single payer and market-based system we currently have regards the pooling of risk. Our current system allows private insurers and pools of care managers to pass risk along to those paying the insurance premiums. Ultimately, "insured" patients receive the short end of the stick, paying in many cases up to 50 percent of their costs out-of-pocket.[30] The single payer plan would pool risk into one universal fund covering everyone. This system would eliminate private medical insurers altogether. Instead, employers and individuals would contribute taxes to a government-managed health care fund, similar to Medicare. Whereas Medicare targets senior citizens, the new health care fund would cover all age groups. By design, a greater portion of every health care dollar spent would actually fund *care*, and not overhead or profit. A single payer system could save $209B a year by reducing private industry overhead and profits.[31] Implementing such a system would affect a vast array of stakeholders.

**Individuals.** From a patient's perspective, a single payer system would shift resources from non-value added administrative costs to improved quality and access. This addresses one of the sharpest criticisms of our current system. The government would set prices – presumably with input from professionals. Additionally, the patient would receive access to medicines determined the most effective for their situations. This "evidence based" approach would prevent patients from falling prey to overmedicating, and they would likely experience higher perceived levels of satisfaction. Of course, not all is rosy with the system's effects on the individual. Although the single payer system would provide coverage for everyone, there is no guarantee that an adequate number of suppliers – and adequate funds to pay them – would exist to meet the resulting demand increase. As harsh as it seems, those currently unable to afford care make choices not to seek care unless the need is urgent, thus providing a rationing mechanism. In the absence of this rationing, demand for health care would rise substantially, and patients could expect to wait a long time for access.

**Health care professionals.** Sixty-five percent of family and general practitioners earn their pay in private practices.[32] Private practices are highly sensitive to administrative overhead costs since their revenue is scarce, compared to large hospitals. Not surprisingly, many vocal physician fans of the single payer system concept fall into this category. Complicated multiple payer systems require extensive training and personnel costs just to complete billing payment cycles. Under a single payer plan, care providers would bill only one entity, using one standardized automated system.

**Employers.** Under a single payer system, employers would still pay large sums in the form of taxes to the global health care fund. Since the fund would no longer finance profit for insurers and managed care programs, employers' contributions would more greatly benefit actual employee health. Employees would experience greater satisfaction by having to pay fewer out-of-pocket expenses. Smaller employers typically can only afford to offer temporary employment with no benefits. Their cost burdens would increase via taxes, but their ability to recruit would also improve, as health benefits would no longer drive employee decisions.

**Insurers.** A single payer system would have the greatest impact on insurers, essentially displacing their services entirely. The central health fund would pay all health care bills, resulting in no coverage gaps, no residual risk, and no demand for duplicative, overlapping insurance coverage. This severe change would require extraordinary attention. The change would necessitate careful management, with incremental phasing out of services and workforce transition plans to enable the smooth transition of insurers into other markets. Some skills would easily translate to other insurance markets. Others would require retraining. Early retirement packages and other incentives might ease transitions.

**Lawyers.** Lawyers, particularly those who specialize in medical malpractice, would experience little impact by the implementation of a single payer system. There would still be a market for bringing to justice those who misuse or abuse their medical talents, resulting in injury or death. A central fund would combine risk of all stakeholders into

one pool. The central health fund would pay settlements. Cultural shifts over time could influence juries' willingness to award large pain and suffering settlements. As taxpayers contributing into the single payer system, more jurors might be concerned about keeping pain and suffering settlements under control.

**The Government (Federal, State, and Local).** A single payer system would have the unfortunate side effect of expanding the role of the federal government. It would require administration and oversight of a huge central health care fund. On a positive note, it would provide new job opportunities, and would result in more favorable unemployment figures. However, any time the government administers a program, the hidden costs of bureaucracy mask the true overhead costs, which could skyrocket. Additionally, the regional boards of directors responsible for negotiating prices for services, procedures and pharmaceuticals would require extensive oversight.

**Pharmaceutical Industry.** The single payer concept's pharmaceutical pricing plan could heavily influence pharmaceutical revenues. A single buyer arrangement would enable the central health care administrators to negotiate quite favorable prices. The pharmaceutical industry would be able to handle this change as long as the government assisted them by extending the longevity of drug patents. As long as companies were able to earn their target revenue over the long term, the changes brought on by the new system would merely shuffle their cash flow. If, on the other hand, a single payer plan ignored the interests of pharmaceutical companies, these companies would continue to lobby vigorously against a single payer system implementation.

**Analysis.** A transition to a single payer system would require careful change management. Likewise, it would require all stakeholders' participation. Pilot programs would require testing prior to universal implementation. Critics of the Clinton health care reform plan cited the unfortunate consequences of trying to do too much too soon as the main cause of its failure in the Congress. Incremental achievable successes could build on one another to reach the final goal. The strategic plan would need to account for displaced employees. The plan would need to address an information and marketing campaign to celebrate incremental successes and maximize transparency. People must believe the care they receive is sufficiently expedient and effective. Perceptions of our health care effectiveness influence our soft power in both local and global politics.

**Recommendation.** A single payer system is a logical vision to ensure the efficacy of our health care's future. Taking into account our nation's unique emphasis on competition, the new system should be independent of the government and administered privately, much like the Federal Reserve Bank. Because trust is so crucial, just as it is in our banking system, the transition to a new system requires careful change management, incremental execution, and an effective information and marketing strategy. The consequences of doing nothing are unacceptable. Unfavorable cost, access and quality trends will continue to result in dissatisfaction with U.S. public health. Additionally, negative opinions of the U.S. internationally will continue to erode U.S. soft power, a vital tool for working with others to defend our global national security interests. Author: Lt Col Mary Pulliam

## MEDICARE AND MEDICAID POLICY ISSUES

**Introduction.** The Department of Health and Human Services is the United States government's principal agency for protecting the health of all Americans and providing essential human services, especially for those least able to help themselves. The United States spends more money on health care than any other nation in the world, yet nearly 45 million Americans under the age of 65 have no health care insurance. The uninsured primarily come from working families with moderate to low incomes that do not receive health care coverage in the workplace.

**Medicare.** Medicare is the federal insurance program for people age 65 and older and certain disabled people. The Medicare program consists of three parts, Medicare Part A (hospital insurance), Medicare Part B (supplemental medical insurance), and Medicare Part D. Part B covers doctor's services, outpatient hospital services, durable medical equipment and a number of other miscellaneous medical services. Part D is initially providing access to prescription drug discount cards and transitional assistance to low-income beneficiaries.

**Medicaid.** Medicaid is the federal insurance program that helps pay for medically necessary services for the low-income people that lack health insurance, disabled elderly that require long-term care, and non-elderly disabled persons who require acute and long-term care. The costs associated with the administration of the Medicaid program is divided between the federal and state governments. The proportion of each state's fiscal responsibility is based on the state's per capita income relative to the rest of the nation. A person may qualify and receive coverage from both Medicare and Medicaid, but there are separate eligibility requirements for each program and being eligible for one program does not necessarily mean being eligible for the other.

Even with Medicare, Medicaid and private health care insurance, approximately 19% of the United States population under the age of 65 has no health care insurance. To exacerbate the problem, employers are reducing the amount of health care insurance offered to employees due to rising costs.

**Medicare and Medicaid: Implications of Patient Access.** For those individuals that are covered by Medicare or Medicaid, entry into the health care market is uncompetitive and based solely on age and income. For the privately insured and uninsured, access to health care is competitive and varies by cost, complexity, and legislative regulation. Market conditions within the health care industry are fixed in the short to medium term for recipients of Medicare and Medicaid as it is legislated. Making any changes to the health care system is difficult due to legislative issues, cost of the programs, and because health care is a very emotional issue.

The most dramatic change that could come to the health care industry as a whole would be if the United States moved to a single payer system like many other nations around the globe. The biggest question then becomes, should everyone be provided the

same level of care as determined by the federal government? Alternatively, should the United States maintain a multi-payer system that has its weaknesses, but also many benefits? A single payer system would be far more predictable, equitable, and cost effective, but might limit care as compared to the amount of care individuals receive under the current system. Additionally, a single payer system would most likely restrict the relatively easy access to health care that we have today for the 81% of the insured population, or at a minimum increase the length of time it takes to receive the required care. All of the federal government's attention must work towards reducing the number of the uninsured in our society.

**Government Policy Recommendations.** As a nation, we must determine if national health is important enough to ensure that every American, without exception, has access to health care. The federal government must make sure that the entire population receives at least a satisfactory level of required care, while maintaining a combination of the best aspects of a multi-payer and single payer system that accommodates the greatest amount of choice. One way to achieve this goal is to study the different health care programs around the world and determine which health care programs would provide the greatest benefit if implemented in the United States.

Next, we must look at implementing comprehensive gap insurance in the short term that can pool the 19% of the population that is uninsured. Not the Medigap type insurance that the elderly can select to supplement Medicare, but rather a pooling of the uninsured and levying the financial burden on the United States taxpayer. Tax increases are not usually politically acceptable; however, one possible solution is to pass legislation for a consumption tax to cover the uninsured or under insured through a Medigap program. The federal government, state governments, and private corporations pay over 40 billion dollars a year of uncompensated care for the uninsured. By grouping the uninsured, we might actually reduce the long-term tax burden by bringing economic efficiencies into the process.

There is no simple policy solution that can be applied to guarantee equal access to health care for all Americans. However, the best model that can be modified to fit our needs is the Canadian health care model. Adversaries to the Canadian health care model say that Canadians get poor care and come to the United States for Surgery. "In truth, only fractions of 1% of Canadians seek care in the United States," says health expert Steven Lewis of Access Consulting in Saskatoon, Saskatchewan. Canada does have waiting lists of 8-12 weeks for surgery not considered urgent. Nevertheless, for most, the wait seems a reasonable tradeoff for coverage that is broad, universal and secure. The Canadian system maintains privatization of health care providers, while ensuring everyone has access to care. The downside as stated is Canadian's average longer waiting time for non-urgent surgical appointments."[33]

The United States must work diligently to resolve the health care access and financing issues, or future generations will pay a huge price for the lack of planning today. Medicare has many challenges that need to be studied and resolved. Currently, Medicare consumes 4% of our GDP and is projected to consume 20% over the next 50

years, if action to mitigate the trend is not taken. Moreover, if the U.S. considers a single payer system, significant national debate will be needed to determine the level of basic coverage for all Americans and the specific revisions to our national health care system. Author: COL Jeffery Unger

## CONCLUSION

No industry sector studied at the Industrial College of the Armed Forces has a more pervasive impact on Americans than the health care industry. Few receive as much attention and none accounts for as much spending. Americans are justly proud that the American health care system can provide the best care in the world. American medical research, whether in pharmaceuticals, equipment, treatment methods, or basic research is unsurpassed.

Unfortunately, as good as the science is, the business end of medicine in the U.S. is a chaotic, inefficient mess. Delivery is uneven, administrative costs are among the highest in the world, and outcomes are not greatly improved by the ever growing expenditures. In grand strategy terms, the nation lacks unity of purpose and unity of mission.

The biggest challenge facing America today is the quality, access, and cost "Iron Triangle." There are competing interests in the health care industry. On one hand, shareholder equity and profits drive health care providers and companies. In order to gain competitive advantage, they seek out new technologies and provide excellent medication and products. All of this leads to higher costs at marginal quality improvements in our health care system.

It will take extraordinary leadership and creativity from the President and the Congress to even begin to solve the problems facing our health care industry. In an era of winner-take-all politics, health care reform demands compromise and accommodation. In the end, that will occur when the American people demand it.

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